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This instrumental qualitative case study examines a formal mentoring program in fulfillment of a National Science Foundation (NSF) ADVANCE grant at SouthEast University. A total of 38 executive mentors and 58 protégées participated in a program that promoted gender equity leadership, professional development, and advancement. The purpose of this study was to explore mentor and mentee perceptions of learning and development experiences, and to determine the efficacy of program elements and leadership pipeline access for women faculty. Based on the results, we offer suggestions for improvement and lessons learned that can help inform similar combined mentoring and leadership development initiatives.

Keywords: women, mentoring, leadership, gender equity, human resource development

INTRODUCTION

The phrase ‘the higher the fewer’ speaks to the pervasive inequity faced by women in academia—where the higher the academic rank, the fewer women one finds (U.S. Department of Education, 2016a). Women outpace men in terms of higher education attainment levels, earning more than 50% of all bachelor degrees since 1982, more than 50% of all masters’ degrees since 1987, and more than 50% of all doctoral degrees since 2006 (U.S. Department of Education, 2016b). In science, technology, engineering, and math (STEM) professions, women represent 46% of scientists, specifically in social, biological, and medical sciences (Liddell, 2016), yet hold fewer positions with high faculty rank, salary, or prestige (Johnson, 2017; U.S. Department of Education, 2015). Simultaneously, women faculty are overrepresented among entry-level, part-time, service, temporary, non-tenure-track, and teaching-only faculty (Curtis, 2011), and underrepresented in leadership roles and in administrative positions (Niemeier & González, 2004).

The resulting leadership gender gap is becoming problematic in higher education. Given the barriers to women’s professional achievement, innovative professional development approaches are needed to

address the ongoing lack of women leaders in STEM careers. One of these innovative approaches is leadership development, particularly when it includes mentoring to enhance socialization, orientation, and career progress of faculty. Such an approach serves to address gender equity and increase the representation and advancement of women (Gibson, 2006). As these types of faculty developmental approaches are also embedded in the larger organizational context, academic institutions benefit from the connection between gender diversity and organizational performance (Hoobler, Masterson, Nikomo & Michel, 2018). Thus, a focus on gender programming creates a pipeline that improves the representation of women in institutional leadership roles, develops leaders committed to improving the status of women scholars, and provides opportunities for faculty and leadership development. This study seeks to examine the implementation of mentoring as part of a leadership development program (“Trailblazers”) that promoted gender equity leadership, professional development, and advancement in fulfillment of an NSF ADVANCE grant at SouthEast University (a pseudonym).

BACKGROUND

Entrenched gender norms disadvantage women in their pursuit of promotion and leadership roles. Women, less so than men, can lack confidence in their ability to attain professorship and have doubt they can eventually lead a research department (Evers & Sieverding, 2015). This is often manifested as imposter syndrome (Clance & Imes, 1978) that describes feelings of fraudulence in which high achieving women do not attribute their success to their own abilities despite many achievements and accolades, and role incongruity (Eagly & Karau, 2002; Hughes & Molyneaux, 2015) or the incompatibility between female gender roles that lead to prejudice. When women faculty do secure leadership roles, they are more likely to be placed in perilous positions that increase their odds of failure—known as the glass cliff (Ryan & Haslam 2005; Peterson 2014).

Typically, academic institutions have dealt with leadership disparities through diversity, inclusion, and sensitivity training initiatives (Dobbin, Kim, & Kalev 2011), yet such initiatives have failed to create more gender-diverse workforce participation and leadership (Ely, Ibarra, & Kolb, 2011). It seems that merely acknowledging a diversity issue is present and attempting awareness is not enough. Ellemers et al. (2012) said that “placing more women in senior positions without working to combat gendered leadership beliefs or reducing organizational gender bias” might actually stall career opportunities for individual women as well as for women as a group (p. 170).

Taking a Human Resource Development Approach

Human resource development, that is—designing learning and leading change in organizations and communities—is an old concept, yet the scholarly pursuit and practice of HRD is quite new (Han, Chae, Han & Yoon, 2017). There is conceptual agreement in scholarship and in practice that HRD’s emphases are career development, training and development, and organization development (Chalofsky, 1992; Swanson, 2001; McLagan, 1989). Human resource development is considered “the study and practice of increasing the learning capacity of individuals, groups, collectives and organizations through the development and application of learning-based interventions for the purpose of optimizing human and organizational growth and effectiveness” (Chalofsky, 1992, p. 179).

Important human resource development approaches, such as mentoring, add a people-centered and ‘holistic’ approach to capacity building and is potentially a way around barriers women face along the path to leadership. Hierarchical mentoring is a dyadic relationship in which career support (e.g., sponsorship, coaching, protection, providing exposure, visibility, and challenging assignments) and psychosocial support (e.g., role modeling, acceptance and confirmation, counseling, and friendship) are offered to a novice or inexperienced employee (protégé/mentee) by a more senior and experienced mentor (Kram, 1983, 1985).

Newer methods of leadership and gender equity programming now focus on how “inequality manifests at the individual, interactional, and institutional levels and accounts for the experiences of men and women across life and career stages and within and across the intersecting dimensions of gender,

race, ethnicity, and class” (Winslow & Davis, 2016 p. 413). Reason & Broido (2005) argue that gender equity leadership programs must educate and inspire the dominant group, create institutional and cultural change, and support target group members. To this end, men have an important role to play in creating gender parity (Anicha, Burnett, & Bilen-Green, 2015). Not only should men become “knowledgeable about their own positions of power and privilege” (Reason & Broido, 2005, p. 61), but they should also understand how sexism provides them with unearned “symbolic capital” (Bourdieu, 1986).

Since it takes dedicated practice to become an expert in a given field, it is highly unlikely that participants will develop fully as a leader merely through participation in a series of programs, workshops, or seminars (Day, Fleenor, Atwater, Sturm, & McKee, 2014). Instead, development occurs in ongoing practice through day-to-day leadership activities and noticing what the participants begin to understand about themselves as they engage in leadership, as well as observing what other leaders do to affect change (Day et al., 2014). Therefore, leadership development programs should function more like educational opportunities than training sessions (Hughes, 2018b).

Mentoring is often cited as a significant aid to supporting women in both science and in leadership. Gorman, Durmowicz, Roskes, and Slattery (2010) cited two universities that successfully used mentoring in programs involving women. A mentoring web at Stevenson University was shown to spur growth in their School of the Sciences. Similarly, peer-mentoring groups supported women in STEM in Brown University’s ADVANCE program. As a developmental tool that provides several organizational benefits, mentoring insulates against the challenges experienced by employees facing organizational change and fostering goodwill and appreciation toward the organization by both mentors and mentees alike (Carmel & Paul, 2015; Viator, 2001). On an individual level, mentoring can stave off disillusionment, invigorate plateaued staff (Carmel & Paul, 2015), and provide psychosocial assistance at work, including role ambiguity, role conflict and perceived environmental uncertainty (Viator, 2001).

Gender Equity Climate at Southeast University

As the underrepresentation of full-time women faculty in science and engineering is a substantial concern for universities, funding agencies and policymakers around the world such as the U.S. National Science Foundation (NSF) seek to develop a more diverse science and engineering workforce (Zippel & Ferree, 2018). In this effort, NSF works with higher education organizations “to increase the representation and advancement of women in academic science and engineering careers” (U.S. National Science Foundation, 2009, p.2). SouthEast University and other determined schools like it, decided to combat the leaky leadership pipeline and educate the organization and individuals on gender equity leadership by applying for an NSF Institutional Transformation ADVANCE grant.

SouthEast University is a doctoral-granting university in the southeastern United States with an R1 (highest research) Carnegie Classification, and is the leading STEM education institution in the state (Jones, 2016). The university consists of seven colleges and 40 academic departments, with 21 STEM fields and with an enrollment of approximately 18,600 undergraduate and 4,500 graduate students. In 2018, full and part-time instructional faculty numbered 1,237 of which 35% were women. Women comprised 38% of faculty in non-STEM departments and 19% in STEM fields (Jones, 2016). The number of university employees at the executive, administrative and managerial level without faculty rank was 212, of which 40% were women, and 58 women or 22% held faculty rank, for a total of 262 formal university leadership roles of which 37% were women (Office of Institutional Research, 2018).

Faculty ranked leadership roles include college deans and department chair positions. In STEM departments, women occupy only two permanent chair/director positions (9%) and only one of the 10 dean/associate dean positions within the three colleges containing STEM departments (10%). None of these positions were held by Black women or non-Black women of color, and only six positions were directed by women STEM faculty (4%) and none by women of color STEM faculty (Jones, 2016; Office of Institutional Research, 2018).

Given the poor representation of women in STEM and non-STEM leadership roles, the university planned a human resource development based leadership development program for faculty. The program, entitled Trailblazers, indicated its purpose was to create a pipeline mechanism for improving the

representation of women in institutional leadership roles, to develop leaders committed to improving the status of women scholars, and to provide opportunities for faculty development through mentorship and sponsorship (Jones, 2016).

METHOD

An instrumental qualitative case study approach seemed fitting for a study on learnings and perceptions about mentoring and gender equity. According to Stake (1995) the instrumental case study is used to understand more than what is obvious to the observer. The qualitative analysis of semi-structured interviews of Executive Mentors and protégées provided valid qualitative data for understanding the learning experiences and perceptions of the participants. Focus groups were conducted with a subset of both Executive Mentors and protégées to facilitate an in-depth exploration of perceptions of gender equity and institutional change, and mentorship. An informed consent form was approved by the university's institutional review board and was provided as an introduction to the interviews and focus groups.

As leadership development and mentoring activities are inexorably linked, the program's goals were to: 1) develop faculty who will recognize and apply leadership theories and skills to successfully conduct gender equity initiatives on campus; 2) enhance faculty's leadership identity; 3) provide faculty leadership development via peer and hierarchical mentoring; 4) recognize equitable workload distribution; recognize and reduce gender bias; and recognize policies which support families; and, 5) provide an opportunity for faculty to apply leadership practices via research and implementation of a leadership project.

Participants

Cohort participation was determined by the university's ADVANCE Executive Leadership Committee via a competitive nomination/application, screening, and selection process intended to identify those who have career aspirations to become academic leaders and who demonstrate potential to contribute to and support furthering institutional diversity (Jones, 2016). Program leadership planned to include one faculty from each of the university's 40 departments. In practice, all faculty who applied were accepted and additional faculty were recruited to participate from the ADVANCE executive leaders and Trailblazers Program Co-Leads to reach a cohort group of approximately 30 participants. Applicants submitted a curriculum vitae, a statement of interest, and a commitment letter from the applicant's department head. Owing to the monthly attendance and preparation requirements that approximated 100 total hours during the academic year, each department chair was asked to reduce other service responsibilities of the participant and/or offer a course release. Nominations to the TIGERS ADVANCE Trailblazers: Provost's Mentoring Initiative for Faculty leadership development program were open to all tenured faculty (and non-tenure track in the second year). Each of the participants in Trailblazers was matched with an Executive mentor in a process that involved mentor/protégée matching.

Two cohorts with a total of 58 tenure and non-tenure track faculty participated in the Trailblazer program. In the first year, a cohort of 28 tenured or tenure track faculty was formed. Of these, 75% were female (n=21) and 25% were male participants (n=7). Each of the seven colleges and library were represented, with the College of Engineering, Computing, and Applied Sciences (n=10) representing the bulk of participants. In year two, a cohort of 30 participants was formed of tenured, tenure-track, and non-tenure track faculty. Of these, 70% were female (n=21) and 30% were male participants (n=9). With the exception of the College of Business, each of the seven colleges and library were represented within the cohort, with the College of Science (n=10) and College of Engineering (n=8) representing the bulk of participants.

Executive mentors were chosen from a pool of the Provost's and his direct reports and, in the second year, from Provost's direct reports, and prior Trailblazer participants. Targeted recruitment emails went out to potential mentors advising them of the personal benefits of participation (training, professional development, and networking opportunities) as well as the systemic benefits (culture change and institutionalization of the program). A total of 38 with most in higher education administrators in faculty

ranked leadership roles (mixture of tenure-track and administrative roles) acted as mentors in the first two years (n=20 in 2017–18; n=18 in 2018–19). There were 21 female Executive Mentors (n=11 in 2017–18; n=10 in 2018–19) and 17 male Executive Mentors (9 in 2017–18; 8 in 2018–19).

Leader Development and Mentoring Curriculum

Table 1 shows the curriculum developed for the leadership development sessions. The program consisted of two, one-day sessions which kicked off the program and concluded the program and seven, half-day Friday sessions, from 12:30 to 4 P.M., from the month of September through May during the 2017/18 and 2018/19 academic years. Each session ended with a 45-minute peer mentoring session.

TABLE 1
CURRICULUM DEVELOPED FOR THE LEADERSHIP DEVELOPMENT SESSIONS:
TOPIC AND INSTRUCTION

Topic	Instruction
Mentoring	
Mentoring (self)	<ul style="list-style-type: none"> • <i>Leadership and the importance of successful mentoring relationships, custom workshop</i>
Network Mentoring (others)	<ul style="list-style-type: none"> • <i>University department chair, custom workshop</i>
Mentoring (others)	<ul style="list-style-type: none"> • Mentoring Program Training, custom workshop
Leadership	
Leader gender bias	<ul style="list-style-type: none"> • <i>Sharen, C., 2016, The Balancing Act: Making Tough Decisions, Harvard Business Review.</i>
Transformational leadership Behavioral and communication styles	<ul style="list-style-type: none"> • <i>Multifactor leadership Questionnaire Introduction to leadership and MLQ assessment debrief, 2011, Mind Garden</i> • <i>Introduction to DISC and assessment debrief</i>
Leading a culture of inclusion and equity	<ul style="list-style-type: none"> • Academic expert, custom workshop
Leading and managing change in higher education	<ul style="list-style-type: none"> • Panel discussion: Executive Director Multicultural Center, Senior Associate Provost, and Former Faculty Senate President. • Ibarra, H. & Hunter, M. (2007). Vivienne Cox at BP Alternative Energy Case Study, <i>INSEAD case study</i>. • Kotter, J.P., (2017), Leading change, why transformation efforts fail, <i>Focus Strategy</i>.
Gender Equity	
Promoting gender equity	<ul style="list-style-type: none"> • Advocate Training, custom workshop
Negotiation and conflict management to mitigate second generation gender bias	<ul style="list-style-type: none"> • Kolb, D. M., (2015). Be your own best advocate. <i>Harvard Business Review</i>. • Kolb, D., (2011). Caitlin's Challenge, <i>Harvard Law School</i>.
Promoting and leading equitable workload distribution	<ul style="list-style-type: none"> • Winslow, S., & Davis, S. N. (2016) Gender inequality across the academic life course. <i>Sociology Compass</i>, 10(5), 404-416. • Fletcher, J. K. & Kolb, D. M. (2018). Deidre's dilemma. Center for Gender in Organizations, Simmons College School of Management. • Kolb, D. M. Pat's problem (2018)

Mentor/Protégée Matching

The design of formal mentoring programs is an important consideration to ensure interpersonal relationships are not impacted so as to diminish efficacy (Germain, 2011; Kram, 1985; Noe, 1988a).

Thus, each cohort member was matched with an executive mentor from the Provost and his cabinet and former Trailblazer members from the 2017/8 and 2018/19 cohorts. Some mentor training was provided for the executive mentors. We anticipated the executive mentors would meet with their protégés once a month. In the Trailblazer program, Cohort members were introduced to peer mentoring and were able to participate in peer mentoring sessions where they met in small groups of five to seven.

The matching of mentors and mentees can have a significant impact on the eventual success of the mentoring relationship. As such, in the first year of the program, our plan for mentor/protégée matching was informal, and we matched according to availability and presumed personality and job role fit. In the second year, we listened to feedback from the first cohort and considered different matching approaches that we hoped would aid the process. Each of the Executive Mentors and protégées filled out a profile form that listed their position/title, information about current role, knowledge, abilities, or skills they wanted out of the mentoring relationship. The information was shared to all before the parties signaled their 1st, 2nd, and 3rd choices via Qualtrics survey. Trailblazer program leads matched Executive mentors and protégées based on the stated choices.

Data Collection

At the conclusion of the first year of the leader development and mentoring program, we conducted 18 interviews of Trailblazer participants and 11 interviews of Executive Mentors. Interview participation was voluntary and conducted in person. The study was approved through the SouthEast University IRB in compliance with human subject protection regulations. In-depth, individual interviews in a semi structured format was our data-gathering method for the qualitative assessment of mentor and mentee experiences. The content of the interview questions was derived from a review of the mentoring literature and were based on broad themes including perceptions of gender equity awareness, leadership efficacy, and mentoring experiences.

For the second-year, we conducted focus groups for the Trailblazers and the Executive mentors at the culminating event for the leadership development and mentoring program in May. The sample for the mentoring focus group consisted of Executive mentor and Trailblazer participants who participated voluntarily. Participants agreed verbally to an informed consent, did not receive incentives, and we asked permission to audio record the meeting, and ensured confidentiality by anonymizing the names and roles of the participants so they would not be identified. Focus group questions were derived from the themes identified for the previous year's interviews in the areas of perceptions of gender equity awareness, leadership efficacy, and mentoring experiences.

Data Analysis

Both interviews and focus groups were transcribed and coded for salient themes using the qualitative software NVivo. Using a collaborative, multi coder approach, we first open coded the data and then aggregated them into overarching themes around valuable aspects of the formal mentoring program, and perceptions of how SouthEast could institutionalize gender equity. Triangulation, or the application of multiple sources of data, is used by researchers to enhance the reliability of the study results (Stavros & Westberg, 2009). We addressed triangulation through collaboration on the line by line coding and by employing member checking to ensure the accuracy of interpretations. By using the same cohort group in the analysis, we addressed transferability, or the degree to which results of qualitative research can be transferred to other contexts or settings (Lincoln & Guba, 1985). Finally, we enriched validation of the analysis by the presence of two experienced qualitative researchers (Creswell & Guetterman, 2019).

RESULTS

Participating executive mentors and protégées shared perceptions of mentoring experiences, and more specifically, the learnings they experienced as a result of mentoring within a leadership development program focused on gender equity. Trailblazers' perceptions of the mentoring experience was overall positive in that the participants both enjoyed and derived value from the program. The semi-structured

interview questions asked were to ascertain what they learned from the program, what are the program elements that work well, and not so well, and under what circumstances, and how, if at all the program contributed to the awareness of gender equity at SouthEast University.

Research Question 1

The first research question asked: What was learned from participation in mentoring activities? The three themes that emerged from the analysis of the interviews and focus group data with respect to what the participants learned were awareness, personal growth, and efficacy.

Awareness varied for the participants, with many participants now cognizant of the different models that exist for mentoring, or at least having become aware of best practices in mentoring, and that it was beneficial. Some had a more broad understanding of mentoring, and others felt it was more nuanced than they had considered.

Delia: It helped me understand that there's different mechanisms to do it. Yeah, so like I'd never heard of mentoring circle. I always thought of just one-on-one mentoring was the way it happened.

Nia: giving a lot of thought to what the other person would need to know to be successful, and then how to get that information to them, and really taking the mentoring relationship seriously, that was something I got out of Trailblazers

Mason: I think the program has opened my eyes to somethings, certainly, gender and equality, and biases for sure, even unconscious biases. I was really astounded by that. So, I think I would actually take that into consideration more especially when I'm having conversations with either female faculty or my female graduate students. I think that would be one of the biggest takeaways, and really being more aware of the issues that they're dealing with, and my mentor, I think, also brought that more to light as a personal example of somebody who is willing to talk about those things with them.

The theme of personal growth also emerged from participants' learning through mentoring. One participant elaborated on how the program helped her recognize that if she could figure out a way to get out of her own way, then she could be very effective as a mentor. Another interviewee elaborated on how they learned through others' mentoring.

Mason: You know, [my mentor] was talking about her experiences and how she got to where she was, and I found that I wasn't so different from her, and she instilled in me, you really could do this, and it's something I never considered before"

Similarly, a focus group participant felt they learned significantly through their mentor:

My mentor, just like her, he was always prepared, he shut the door, he had a folder for me and also had an assignment after each meeting. He was a good listener too and very quickly he would give me suggestions, specific suggestions, actionable. "This? How about this? Have you tried that?" I felt very, very useful. But I came out of there I was thinking, probably you have to be very well organized, clear thinking, so that you can hold that job. Otherwise, for me, no, my office is always messy.

The executive mentors interviewed agreed with the learning aspects of the mentoring experience. One mentor felt she learned more from her protégée than she imparted:

Ann: Personally, I feel that I learned more from my protégé than she did for me because we had several long discussions about work-life balance and following your passion. . . I don't think I had looked back and realized that until she started asking me questions. I started to think, what did I think when I had just gotten tenure? What did I think when I had gotten full professor? For me, it was a very good looking back experience and thinking about where I'm going between now and when I retire.

A focus group participant felt similarly:

Mentoring is about a lot of different things. It's not just one thing for one person. So, once I met with her, I was like, she doesn't need mentoring on this and this, it's more about understanding the complexity of how a university operates from a leadership perspective and how to be flexible.

The final theme that emerged was that of efficacy. Participants shared they felt they now had the tools and confidence to mentor more effectively.

Delia: I'm gonna definitely use the knowledge and the strategies to make an investment in building out the program and leading the faculty through a discussion of what that program would look like. I would like to change [my department's] culture through mentoring. I'm an introvert. I'm not a social person, but we have people that are really good at socializing, but I'm really good at organizing. So why don't we recognize that and utilize it. That's something that I think mentoring could help bring to light.

We did a role-play thing where one person was the dean or whatever, and you're going in and asking for this . . . and because of that exercise and some things I've learned, then I've now gone and sort of advocating for myself within my department. So, it gave me a little bit of, I didn't need confidence so much as I needed the skills to be able to navigate that process.

Research Question 2

The second research question asked, what are the program elements that work well, and not so well, and under what circumstances? The second year focus group shared impressions of the elements that worked well, and things they wish would have been changed. The mentor match had both champions and detractors. An executive mentor related that although he thought he was matched really well, his two mentees were very different. The process of matching was successful as well. A Trailblazer felt the profile form that both the executive mentor and the protégées' filled out was particularly helpful. In addition, the mentors agreed that the process of meeting potential mentee matches was beneficial:

The meet and greet things where we went around the room and we met for like three minutes with each table or something. That was better than just randomly being paired, which I didn't get a good match the previous year. I think that was an improvement. I would encourage you to continue thinking about how to have the people who want to participate in this program identify their goals and have the mentors identify their capacity to meet those goals and do some deeper matching.

Conversely, there were focus group members that did not enjoy the mentor matching process. One reproach came from a woman critiquing the placement of women mentees:

Since it's programmed to try to advance women in leadership, to try to match especially, sorry guys, the women in the program [should be with] with women leaders or leaders on campus.

Another said there were not enough mentors in general, and one Executive mentor felt the gender equity goals of the program should have been made more explicit, as it would have aided in their mentoring efficacy. Two Trailblazers brought up troubling incidents where the women dealing with mentor matching:

Another colleague at my department, who is a male actually got my first choice for mentor, he's a leader in our college and he just has benefited from that . . . and so, because he had this person as his mentor they kind of talked informally and he was put on the ballot and won and beat me for [the committee]. So it almost seemed counter-productive to the program in some ways and personally disappointing. So I think that making sure that women are given the opportunity to connect with other leaders on campus I think is really important.

The mentor that got selected for me, when I first met him said, "I don't want to mentor someone like you," and then I got an email saying, "This is your assigned mentor." I don't know exactly how we got paired, but it was a very awkward, I didn't quite know how to move forward with that. It turned out to be a good mentoring relationship and that worked, but he definitely said he didn't want to work with me, and then I got paired.

The benefits to the sessions ranged from speakers to the content provided:

Chase: I pulled the most benefit out of the sessions where there were panels of speakers that spoke about their experiences in leadership and administration. We were able to ask questions about how they handled different things. That's where I gained, I think, the most content knowledge of something. Kind of in those types of situation

Nia: Some of the detailed material on types of mentoring and successful mentoring actually was provided to us so early in the program that I don't think we had a lot of context for it. And by the time we got to the end, when I was trying to work with my colleagues to develop a mentoring plan for the college, you know, some of that material had definitely gone out of my mind, and it might have been more useful to have that at the end of the program.

Overall, the Executive Mentors attributed content such as implicit bias, ally empowerment, and enabling difficult conversations to be successful components of the mentoring program.

Research Question 3

The third research question asked: In which ways, if any, can faculty perceptions on mentoring influence the leadership pipeline at SouthEast University? Participants were asked to what extent they thought the program could help improve the representation of women in institutional leadership roles. Overall, respondents mentioned three categories of contribution from the Trailblazer program that could improve the representation of women in institutional leadership roles, including resources, removing barriers, and inclusion.

Bea, for her part, was optimistic about the future of mentoring improving the SouthEast's culture. Other executive mentors mentioned access, opportunity, and transformation of the university:

Fitz: To understand what women [feel] in SouthEast ... Something that I kind of knew about, I'd just never considered it to be such a visceral issue that affected 10 times more women than men. Us, as males ... I want to think that most of the time, we will do it rationally or intentionally, just to make sure women are at the table, but I don't.

Marvin: I think it all begins with access. So the idea that women or transgender folks have access to various opportunities to do that and that requires creating organizational policies and practices that ensure they have access. Gender equity then would be the idea that we are aware of the gender or transgender or of individuals and we understand that there is great value in having different gender, we could say females, in prominent leadership roles in all organizations.

Nia cautioned against placing onerous service requirements on the backs of female faculty:

Nia: So much of this stuff, historically, at SouthEast, these types of service things have fallen on the back of young faculty, female faculty, faculty of color, where people are like, "Hey come do this important service activity to help women or people of color, whatever it is, but we will give you absolutely no support and encouragement, or money or resources or anything, so it's going to ding your research productivity, but do it! It's really important!" Right?

Executive mentor focus group members mentioned that support of the university administration and that of peers would help to make gender equity mentoring more influential towards creating pipeline access for women faculty:

If we don't have upper administration, deans, and chairs, saying, "Yes, your participation in this is really important and I will reward you tangibly!", then ... and I mean, I know that you know this and I'm preaching to the choir, but it's not going to help [and] it could actually harm the people it's intended to help.

The ability maybe to look at some of my peers in this mentoring program, to reach out to some of them and say, "Hey. Have you been through a situation like this? I have a mentee, a PhD student, who is going through this and I really want to try to find them some guidance, some direction." But, I think that is potentially a huge benefit of this whole program in building our network here at SouthEast.

One of the enduring themes that emerged was that while SouthEast had come a long way, there was still work to do in institutionalizing mentoring and gender equity.

DISCUSSION AND IMPLICATIONS

This instrumental case study explored mentor and mentee perceptions of their learning and development experiences within a gender equity context, and examined the efficacy of the elements of a mentoring program focused on gender equity and leadership pipeline access for women faculty at SouthEast University. Although it is possible to determine causation in qualitative work, in this context of an ongoing leadership development and mentoring program, not enough time has elapsed to assess causation in such a retrospective manner, nor is determining causation necessarily a stronger form of explanation (Miles, Huberman & Saldana, 2014). Rather, our study produced rich outcomes that we can use to support refinements of our mentoring initiatives at SouthEast University. Finally, this study supports adding human resource development (HRD) initiatives in other contexts, particularly those focusing on gender equity.

The participant's perceptions of what they learned during the leadership program elements as well as from the hierarchical mentoring they received as participants, offers program administrators the opportunity to bolster future participants' learning through awareness, personal growth, and efficacy. If managing oneself is important to leadership and mentoring relationships, then making both mentors and protégées aware of how to more clearly articulate their needs in mentoring relationship dynamics could be a learning growth edge. Thus, adding program material on gender dynamics could be helpful for participants who feel more comfortable in a single gender environment. Likewise, including training on social role theory for executive mentors who may find themselves mentoring different genders, would aid the participants to which learning is tied to gender perceptions. In Eagly, Wood, & Diekmann's (2000) social role theory, perceivers make an inference between the types of actions people engage in and their inner disposition.

Efficacy should be a primary goal of both the leadership development and mentoring outcomes of the program. Self-efficacy is defined, in part, as a belief in one's ability to accomplish specific goals and tasks (Bandura, 1994). This is reinforced by Feldman, Areal, Marshall, Lovett, & O'Sullivan's (2010) study on mentee efficacy at a large health sciences university that indicated that faculty with mentors had higher self-efficacy than those who were not mentored. In the study, it was suggested that a key area of future research and potential should address what underlies the disconnect between what faculty mentors and mentees discuss in mentoring meetings and what areas mentees say they need assistance. These strategies, along with experiential learning opportunities, such as the use of case studies specific to gender equity leadership, activities such as role playing, and an emphasis on continuous self-reflection to elicit double-loop learning (Argyris, 1994) could help make participants feel efficacious.

Overall, a human resource development approach should be prominent in program design. HRD is deeply concerned with developing and unleashing an organization's collective expertise and with the individual charge to provide opportunities to learn necessary skills to meet current and future job demands (Shinde, Abhilasha & Ramakumar, 2015; Werner & DeSimone, 2006). However, while there is a generalized sense in organizations that 'anyone' can perform HRD functions, not everyone is good at incorporating its tenets (Cansever et al., 2014). There is danger in designing and implementing leadership development programs that are devoid of sound HRD practice as it is unlikely such efforts will have immediate impact or enduring effect (Bierema, 2017). The approach taken in this setting was for human resource development scholar practitioners to design interventions that would help the organization and its individual leaders learn to build capacity and cope with a continuously changing environment (Garavan, 2008). Leadership development was supplemented by mentoring that was focused on open-ended personal development (Deans, Oakley, James, & Wrigley, 2006).

The HRD-focused approach also incorporated identity work in the leadership development program, where one becomes a leader, as one's leadership identity is formed (Ely, Ibarra, & Kolb, 2011). Allowing participants to see leadership roles modeled and having them interact with other leaders permitted them to try on leadership identities, internalize, and expand the repertoire of leader identities available they were willing to consider (Sims & Carter, 2019). Ultimately, taking a developmental approach to building leaders that incorporated leader development, mentoring and coaching was a wise multi-pronged tactic that exemplified the tenets of HRD which are learning, organization development, and career development.

The elements that were advantageous to the participants—namely, the content, speakers, and the mentoring selection process garnered the most affirmative replies. These same elements also received quite a bit of pushback. The selection process for mentors is likely to be tweaked for the upcoming Trailblazer session based on the executive mentor suggestions to streamline the process. In addition, the two incidents with mentor matching need to be addressed in future cohorts. One incident happened where the woman Trailblazer's male colleague received her first choice and who eventually was selected for a committee over her, and the other incident involved an executive mentor who stated he did not want a particular woman protégée. In keeping with recent research on two-way mentor matching approaches we hope to substantially improve the mentor matching process (Haas, Hall, & Vlasnik, 2018).

Extending the leadership pipeline access for women on SouthEast's campus is no small feat. In order to facilitate such an undertaking, upper administration needs to take a proactive approach to institutionalizing the ADVANCE grant initiatives, such as the Trailblazer and Advocate programs. The addition of the results of our study of years 1 and 2 in this and similar studies, adds richness in developing a list of priority needs. In this, men play an important role in creating a more accepting and equitable climate for women faculty (Bilen-Green, Green, McGeorge, Anicha, & Burnett, 2013). A critical piece is to attend to the training of implicit bias and understand the range of subtle microaggressions that can result in systemic bias, and explore relevant aspects of male gender socialization and role of sexism. Some of that is already being implemented with other ADVANCE aligned initiatives at SouthEast University. We should make men aware of 'mansplaining' and 'bropropriating', where men explain things to women in a condescending fashion, or take credit for ideas a woman has previously asserted, respectively. Our goal should be working with men on taking a less dominant position in meetings and being mindful about allowing more space for others to speak. In addition, we should reduce enabling behaviors and increase bystander interventions, and increase empathy and understanding of impact of gender equity/parity. Finally, we need to work on the departmental climate where women were significantly more likely to report feeling isolated and excluded from the department, encounter unwritten rules that create barriers for advancement, and department decision making was not equal, or there was an unequal valuation of their research (Bilen-Green, et.al., 2013; Anicha, Bilen-Green, Green & Burnett, 2015).

The many comments in the interviews and focus groups on mentoring being a vehicle to increase the pipeline for women leaders indicate that mentoring should be set up, and prominent features should include mentoring collaboration, transparency, and networking. In addition, we should take care to not add any more weight to women faculty service loads. Comments within the study suggested the establishment of a reward and incentive system for mentoring participation both financially and in tenure and promotion documentation. All of this is with the understanding that the disadvantages faced by women faculty are part of a systemic problem and when a problem is systemic, to create change, we need to examine the other side of the system (Anicha, et.al. 2015).

The researcher's expectations of this instrumental case study that was focused on improving systemic and individual gender equity leadership through mentoring relationships were quite lofty. The purpose of this study was to explore mentor and mentee perceptions of their learning and development experiences within a gender equity context, and to determine the efficacy of program elements and leadership pipeline access for women faculty. We anticipated to find that mentoring improved leadership practices of the program participants, and that learning would occur organically once the mentor-mentee matches occurred. Instead, we found that interactions within the mentoring pairs was less spontaneous than we anticipated and needed to be guided. Both the mentor matching and mentor training processes revealed areas of improvement and opportunities to fine tune processes. Analogous to this realization was the researcher's assumptions that the messaging of the gender equity emphasis of the program was overt. In fact, some of the participants in both the mentor and mentee groups did not realize gender equity and pipeline access for women was an explicit focus of the program.

Maintaining a competitive advantage is crucial to survival in an uncertain organizational landscape. The key to this advantage is a workplace that prominently features gender equity leadership development programming, and formal and informal mentoring opportunities, as well as providing support and education for the organization and individuals on gender equity leadership pipeline growth prospects for women faculty. We believe lessons learned from the Trailblazer program under the auspices of the ADVANCE NSF grant can help inform similar combined mentoring and leadership development initiatives in academia and beyond.

FUTURE RESEARCH

The results of this case study and information obtained from the literature led to recommendations for further research. First, research on practical ways to facilitate mentor and mentee matching to spur

positive mentoring relationships should be undertaken. Second, more quantitative and mixed method research is needed to explore how mentoring programs with a gender equity focus impact leadership practice and individual and organizational learning. Last, two of the three researchers work, research, and facilitate programs using other human resource development methods, namely individual coaching and acknowledge that many in science, technology, engineering, and math (STEM) fields do not employ such practices within professional and leadership development programming. Impactful research could be conducted on the influence of targeted training programs and coaching for mentors on protégées.

REFERENCES

- Anicha, C. L., Burnett, A., & Bilen-Green, C. (2015). Men faculty gender-equity advocates: A qualitative analysis of theory and praxis. *The Journal of Men's Studies*, 23(1), 21-43.
- Anicha, C. L., Bilen-Green, C., Burnett, A., Froelich, K., & Holbrook, S. (2017). Institutional transformation: Toward a diversity-positive campus culture. *Journal of Women and Minorities in Science and Engineering*, 23(2).
- Argyris, C. (1994). Good communication that blocks learning. *Harvard Business Review*, 72(4), 77-85.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press.
- Bierema, L. L. (2017). No woman left behind: critical leadership development to build gender consciousness and transform Organizations. *Handbook of Research on Gender and Leadership*, 145-164.
- Bilen-Green, C., Green, R. A., McGeorge, C., Anicha, C. L., & Burnett, A. (2013). *Engaging male faculty in institutional transformation*. In 2013 ASEE Annual Conference and Exposition.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *The handbook of theory: Research for the sociology of education* (pp. 241-258). New York, NY: Greenwood.
- Cansever, Z., Acemoglu, H., Avsar, U. Z., Akturk, Z., Set, T., Avsar, U., & Cayir, Y. (2014). What do trainers think about trainer training courses? *J Pak Med Assoc.*, 64(5), 491-5.
- Carmel, R. G., & Paul, M. W. (2015). Mentoring and coaching in academia: Reflections on a mentoring/coaching relationship. *Policy Futures in Education*, 13(4), 479-491.
- Chalofsky, N. (1992). A unifying definition for the human resource development profession. *Human Resource Development Quarterly*, 3(2), 175-182.
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice*, 15(3), 241.
- Creswell, J. W., & Guetterman, T. M. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Upper Saddle, NJ: Pearson.
- Curtis, J. (2011). *Persistent inequality: Gender and academic employment*. Retrieved from: <http://www.aaup.org/NR/rdonlyres/08E023AB-E6D8-4DBD-99A024E5EB73A760/0/persistentequity.pdf>
- Day, D. V. (2000). Leadership development: A review in context. *The Leadership Quarterly*, 11(4), 581-613.
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25(1), 63-82.
- Deans, F., Oakley, L., James, R., & Wrigley, R. (2006). Coaching and mentoring for leadership development in civil society. *Praxis Paper*, 14, 1-37.
- Dobbin, F., Kim, S., & Kalev, A. (2011). You can't always get what you need: Organizational determinants of diversity programs. *American Sociological Review*, 76, 386-411.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573-598. doi: 10.1037/0033-295X.109.3.573
- Eagly, A. H., Wood, W., & Diekmann, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. *The developmental Social Psychology of Gender*, 12, 174.

- Ellemers, N., Rink, F., Derks, B., & Ryan, M. K. (2012). Women in high places: When and why promoting women into top positions can harm them individually or as a group (and how to prevent this). *Research in Organizational Behavior*, 32, 163-187.
- Ely, R. J., Ibarra, H., & Kolb, D. M. (2011). Taking gender into account: Theory and design for women's leadership development programs. *Academy of Management Learning & Education*, 10(3), 474-493.
- Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist*, 49(8), 725.
- Evers, A., & Sieverding, M. (2015). Academic career intention beyond the PhD: Can the theory of planned behavior explain gender differences? *Journal of Applied Social Psychology*, 45, 158-172.
- Feldman, M. D., Acrean, P. A., Marshall, S. J., Lovett, M., & O'Sullivan, P. (2010). Does mentoring matter: results from a survey of faculty mentees at a large health sciences university. *Medical Education Online*, 15(1), 5063.
- Garavan, T. N., & McCarthy, A. (2008). Collective learning processes and human resource development. *Advances in Developing Human Resources*, 10(4), 451-471.
- Germain, M. L. (2011). Formal mentoring relationships and attachment theory: Implications for human resource development. *Human Resource Development Review*, 10(2), 123-150.
- Gibson, S. K. (2006). Mentoring of Women Faculty: The role of organizational politics and culture. *Innovative Higher Education*, 31(1). DOI: 10.1007/s10755-006-9007-7.
- Gorman, S. T., Durmowicz, M. C., Roskes, E. M., & Slattery, S. P. (2010). Women in the academy: Female leadership in stem education and the evolution of a mentoring web. *Forum on Public Policy Online*, (2). Retrieved from <http://forumonpublicpolicy.com/papers.htm>
- Haas, C., Hall, M., & Vlasnik, S. L. (2018). Finding optimal mentor-mentee matches: A case study in applied two-sided matching. *Heliyon*, 4(6), e00634.
- Han, S. H., Chae, C., Han, S. J., & Yoon, S. W. (2017). Conceptual organization and identity of HRD: Analyses of evolving definitions, influence, and connections. *Human Resource Development Review*, 16(3), 294-319.
- Hoobler, J. M., Masterson, C. R., Nkomo, S. M., & Michel, E. J. (2018). The business case for women leaders: Meta-analysis, research critique, and path forward. *Journal of Management*, 44(6), 2473-2499.
- Hughes, C. (2018). Conclusion: Diversity intelligence as a core of diversity training and leadership development. *Advances in Developing Human Resources*, 20(3), 370-378.
- Hughes, R., & Molyneaux, K. (2015). Unpacking secondary school students' identity negotiations regarding science and engineering: A case study in the United States. *International Journal of Gender, Science and Technology*, 6(3), 291-309.
- Johnson, H. L. (2017). *Pipelines, pathways, and institutional leadership: An update on the status of women in higher education*. Washington, DC: American Council on Education.
- Jones, B. (2016). *ADVANCE Proposal to the National Science Foundation*.
- Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26(4), 608-625.
- Kram, K. E. (1985). Improving the mentoring process. *Training & Development Journal*.
- Liddell, E. L. (Ed.). (2016, November 1). *Highlights of women's earnings in 2015: BLS Reports*. Retrieved November 7, 2019, from <https://www.bls.gov/opub/reports/womens-earnings/2015/home.htm>.
- Lincoln, Y. S., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- McLagan, P. A. (1989). Models for HRD practice. *Training & Development Journal*, 43(9), 49-60.
- Miles, M. B., & Huberman, A. M. Saldana. (2014). *Qualitative data analysis: A methods sourcebook*, 3.
- Niemeier, D. A., & González, C. (2004). Breaking into the guildmasters' club: What we know about women science and engineering department chairs at AAU universities. *NWSA Journal*, 157-171.
- Noe, R. A. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41(3), 457-479.

- Office of Institutional Research. (2018, 11 1). *Fact Sheet 2017*. Retrieved from Office of Institutional Research, Data and Reports: <http://www.clemson.edu/institutional-effectiveness/documents/oir/minis/F17FactSheet.pdf>
- Peterson, H. (2016). Is managing academics “women’s work”? Exploring the glass cliff in higher education management. *Educational Management Administration & Leadership*, 44(1), 112-127.
- Reason, R. D., & Broido, E. M. (2005). Issues and strategies for social justice allies (and the student affairs professionals who hope to encourage them). *New Directions for Student Services*, 2005(110), 81-89. doi:10.1002/ss.164
- Ryan, M. K., & Haslam, S. A. (2005). The glass cliff: Evidence that women are over-represented in precarious leadership positions. *British Journal of Management*, 16(2), 81-90.
- Shinde, R., Abhilasha, A., & Ramakumar, A. (2015). *Human Resource Development*. Delhi, Himalaya Publishing House.
- Sims, C. M., & Carter, A. D. (2019). Revisiting Parker & ogilvie’s African American Women Executive Leadership Model. *Journal of Business Diversity*, 19(2).
- Stake, R. (1995). *The art of case research*. Thousand Oaks, CA: Sage Publications.
- Stavros, C., & Westberg, K. (2009). Using triangulation and multiple case studies to advance relationship marketing theory. *Qualitative Market Research*, 12, 307–320. doi:10.1108/13522750910963827
- Swanson, R. A. (2001). Human resource development and its underlying theory. *Human Resource Development International*, 4(3), 299-312.
- U.S. Department of Education. (2015). *Digest of Education Statistics 2015, Table 318.10*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- U.S. Department of Education. (2016a). *Digest of Education Statistics 2016, Table 315.20*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- U.S. Department of Education. (2016b). *Digest of Education Statistics 2016, Table 316.10*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- U.S. National Science Foundation (2009) *ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE) Program Solicitation, NSF 12-584*. Retrieved from <https://www.nsf.gov/pubs/2012/nsf12584/nsf12584.htm>
- Viator, R.E. (2001) The relevance of transformational leadership to non-traditional accounting services: Information systems assurance and business consulting. *Journal of Information Service*, 15(2), 99–125.
- Werner, M. J., & DeSimone, L. R. (2006) *Human Resource Development* (5th ed.). Cengage Learning India Private Limited.
- Winslow, S., & Davis, S. N. (2016). Gender inequality across the academic life course. *Sociology Compass*, 10(5), 404-416.
- Zippel, K., & Ferree, M. M. (2018). Organizational interventions and the creation of gendered knowledge: US universities and NSF ADVANCE. *Gender, Work & Organization*. Retrieved from http://universitywomen.stanford.edu/reports/Creating_gender_equity_academia.pdf